

BAKALEYNIK, A. M.

"Investigation of the Effect of Supercharging on the Performance of an Automobile Carburetor Engine." Sub 27 Apr 51, Moscow Automotive Mechanics Inst.

Dissertations presented for science and engineering degrees in Moscow during 1951.

SO: Sum. No. 480, 9 May 55.

194 KAKRYUK, A.M.

BAKALEYNIK, A.M.

Problems of supercharging of carburetor engines. Izv.TPI 85:69-78
'57. (MIRA 10:12)

1. Predstavleno prof. doktorem tekhn.nauk V.K. Nechayevym.
(Automobiles--Fuels systems)

ZAYTSEV, V.A., kand. tekhn. nauk; LERNER, M.O., kand. tekhn. nauk; ARONOV, D.M.,
kand. tekhn. nauk; BAKALEYNIK, A.M., inzh.

Effect of functional additives to manganese antiknock compound
on the wear and scale formation in an engine. Ekspl.-tekhn. svois.
i prim. avt. top. smaz. mat. i spetszhid. no.3:5-9 '63.

Evaluating the effect of additives to gasoline on the performance
of spark plugs. Ibid.:9-15

(MIRA 17:10)

BAKALEYNIKOV, Aleksandr Mikhaylovich; ISAKOV, Nikolay Mikhaylovich;
NIKITIN, P.S., redaktor; VOLCHOV, K.M., tekhnicheskiy redaktor

[Inclined plane boat elevator] Poperechnye naklonnye sudo-podzemniiki. Leningrad, Izd-vo "Rechnoi transport," Leningradskoe otd-nie, 1955. 219 p.
(MLRA 9:3)
(Elevators)

GORNUSHKIN, Yu.G., kand.tekhn.nauk; BAKALEYNIK, A.M., kand.tekhn.nauk

Reviews and bibliography. Avt.prom. 31 no.4:48-49 Ap '65.

(MIRA 18:5)

1. Vladimirskiy politekhnicheskiy institut.

145211-3

ASSISTANT NRI AF-01524

TR/1978/00/009/0134 0034

AUTHORS: Borodulin, I. B.; Gavrilov, V. V.; Kuznetsov, P. S.; Raxaleynik, I. M.

TITLE: Device for automatic regulation of output of duplex amplifiers for loudspeaker links. (see L. No. 1739)

SOURCE: Byull. Izobretenij i Tovarnyj Znak, No. 7, 1978, 24

TOPIC TAGS: amplifier, automatic control, loudspeaker

ABSTRACT: This A.I. certificate provides a device for automatic amplification control in duplex amplifiers for loudspeaker links according to Author certificate No. 171749. To increase the amplifier gain, it is proposed to broaden the range of automatic amplification control, a variable current source is connected in the direct-current circuit controlled by the voltage. The current source is derived from the potential difference between two resistors connected in the supply circuit of the last stages of the power and transmission amplifiers operating on the A. mode (see Fig. 1). In this circuit, the current source is supplied from a divider of fixed voltage, connected to the power supply. It is proposed to supply the amplifier with a bypassing channel with small

Code 1/0

100-111-1
ACCESSION NR: AP5015249

control signals, each circuit of the supplementary control source derived from the current change in the source of the signal, is connected separately for each amplification channel. Orig. art. has 10 diagr.

ASSOCIATION: none

SUBMITTED: OJWants

ENCL: 11

SER CODE: EC

NO REP Sov: 000

OTHER: 000

Card 2/3

14(5)

SOV/127-59-3-8/22

AUTHORS: Yermolayev, V.I., Bakaleynik, Ya.M. and Vinogradov, L.V., Engineers.

TITLE: The Semi-Automatic Control of Mechanisms in the Mine Shaft.(Poluavtomaticheskoye upravleniye mekhanizmami shakhtnogo stvola.)

PERIODICAL: Gornyy zhurnal, Nr 3, 1959, pp 31-33 (USSR)

ABSTRACT: An experimental installation for the semi-automatic control of hoising mechanisms in the Kapital'naya Nr 2 pit of the Degtyarka Copper Mine has successfully passed industrial tests. The installation was developed by the KB TsMA (Design Office of Tsvetmet-tavtomatika) in collaboration with the Degtyarka Mine. The maximum utilization of already existing mechanisms equipped with pneumatic gear was taken into consideration. Air distributing devices VR-350 (figure 1) developed from ENIMS air distributors, are used in the system. Two men in the hoist cage direct different operations in the hoisting shaft. The system is des-

Card 1/2

SOV/127-59-3-8/22

The Semi-Automatic Control of Mechanisms in the Mine Shaft.

cribed in detail (figure 2). The introduction of this system in the Kapital'naya Nr 1 and Nr 2 pits will permit a reduction of 30 men in the working staff. This represents a yearly saving of 340,000 rubles. There are 2 diagrams.

ASSOCIATION: Tsvetmetavtomatika, Moscow.

Card 2/2

ANFILOV, A.A., inzh.; BAKALEYNIK, Ye.M., inzh.; BIRGER, G.I., inzh.; BRUK, B.S., inzh.; BUROV, A.I., inzh.; GINZBURG, V.L., inzh.; ZABELIN, V.L., inzh.; ZAPLECHNYY, Ye.G., inzh.; ISAYEV, D.V., inzh.; KLIMOVITSKIY, A.M., inzh.; KRYUCHKOV, V.V., inzh.; KOTOV, V.A., inzh.; LEYDERMAN, A.Ye., inzh.; PODGOYETSKIY, M.L., inzh.; SAZHAYEV, V.G., inzh.; SEVAST'YANOV, V.V., inzh.; FILIPPOV, S.F., inzh.; FROMBERG, A.B., inzh.; SHNEYEROV, M.S., inzh.; ERLIKH, G.M., inzh.; VERKHOVSKIY, B.I., red.; ZUBKOV, G.A., red.; KARKLINA, T.O., red.; OVCHARENKO, Ye.Ya., red.; ANTONOV, B.I., ved. red.

[New means of automatic and centralized control for nonferrous metal mines] Novye sredstva avtomatizatsii i dispatcher-skogo upravleniya dlia rudnikov tsvetnoi metallurgii. Moskva, Nedra, 1965. 93 p. (MIRA 18:4)

BARALEYNIK, Ya.M.; BERAK, L.A.

The VP-350 air distributor. Sbor.mat.po avtom.proizv.prots.i disp.
no.5:118-121 '60. (MIRA 14:4)

1. Konstruktorskoye byuro "TSvetmetavtomatika."
(Pneumatic control)

ISAKOV, N., inzh.; BAKALEYNIKOV, A., inzh.; OL'BEK, A., inzh.

Inclined ship lift without sluice chambers. Rech. transp. 19
no.11:36-38 N '60. (MIRA 13:11)
(Locks (Hydraulic engineering))

PEKHTEREV, A.G.; BAKALEYNIKOV, B.S.

Thyroid gland function of workers in sulfuric acid production.
Vrach. delo no.4:114-115 Ap '61. (MIRA 14:6)

I. Kafedra rentgenologii i radiologii (zav. - dotsent B.Z.Sukhorukov)
Vinnitskogo meditsinskogo instituta.
(THYROID GLAND) (SULFUR DIOXIDE)

ACG NR: AP6023958

SOURCE CODE: UR/0318/66/000/003/0020/0024

AUTHOR: Sinitsyn, V. V.; Bakaleynikov, M. B.

ORG: none

TITLE: Some aspects of the properties of plastic silica gel lubricants with a petroleum oil base

SOURCE: Neftepererabotka i neftekhimiya, no. 3, 1966, 20-24

TOPIC TAGS: silica gel, lubricant

ABSTRACT: An attempt was made to begin a systematic study of the effect of basic compounding and process factors on the properties of silica gel lubricants. Three samples of lubricants were prepared from MVP oil, industrial 12 oil, and a mixture of aviation MK-22 oil and winter diesel fuel by homogenizing suspensions of oils and 10 wt.% SiO_2 . The viscosity, shearing strength, and colloidal stability of the lubricants were measured. An increase in the homogenization time was found to affect the properties of the silica gel lubricants substantially. The maximum shearing strength was observed at 50°; both a rise and a drop of temperature decreased the strength markedly. A mechanism is proposed to account for this very unusual behavior. The effect of the nature and viscosity of the dispersion medium on the properties of silica gel lubricants prepared from the various petroleum oils was determined. Orig. art. has 4 figures and 1

Card 1/2

UDC: 665.44-405:661.183.7001.51621.45

ACC NR: AP6023958

table.

SUB CODE: 11/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 004

Card 2/2

GABOVICH, R.D., BELAGA, M.B., BAKALEYNIKOV, S.B. (Vinnitsa)

Improvement in working conditions at the Vinnitsa Superphosphate
Plant since the war. Gig.truda i prof.zab. 2 no.21-25 Mr-Ap'58
(MIRA 11:6)

1. Kafedra gigiyeny meditsinskogo instituta i gorodskaya sani-
tarino-epidemiologicheskaya stantsiya.
(PHOSPHATE INDUSTRY--HYGIENIC ASPECTS)

BAKALEYNIKOV, S.S.

Techniques of oral cholecystography. Klin.med., Moskva 29
no.5:81-82 May 1951. (CLML 20:9)

1. Lt. Col. Medical Corps.

BAKALEYNIKOV, S. S.

Roentgenologic observation during intestinal irrigation;
preliminary data. Klin. med., Moskva 29 no.8:37-39 Aug
1951. (CIML 20:11)

BAKALEYNIKOV, S.S.

Comparison of clinico-roentgenological data in biliary colic syndrome.
Khirurgiia 32 no.6:40-43 Je '56. (MLRA 9:10)

1. Iz rentgenologicheskogo otdeleniya ('nach. - kandidat meditsinskikh
nauk L.D.Gubskiy nauchnyy rukovoditel' - zasluzhennyy deyatel' nauki
prof. S.A.Reynberg) Glavnogo voyennogo gospitalya imeni N.N.Burdenko.
(GALLBLADDER, dis.
diag., x-ray)

BAKALEYNIKOV, S.S. (Moskva)

Some problems in the roentgenodiagnosis of diseases of the biliary tract. Klin.med. 34 no.3:69-74 Mr '56. (MIRA 10:1)

1. Is Glavnogo voyennogo gospital'ya (nachal'nik - I.N.Kurgannikov)
(CHOLECYSTOGRAPHY,
(Eng))

BAKALEYNIKOV, S. S., Cand Med Sci -- (diss) "Cholecystography
in the Light of Clinicoroentgenological Comparison." Mos,
1957. 14 pp (Min of Health USSR, Central Inst for the Advanced
Training of Physicians), 200 copies (KL, 50-57, 120)

- 29 -

BAKALIKOVA, O.
TECHNOLOGY

periodicals: HUTNICKE LISTY Vol. 13, no. 10, Oct. 1958
ODVARKA, J.; BAKALIKOVA, O. Automatic grinding and polishing of
metallographic specimens. p. 916

Monthly List of East European Accessions (EEAI) LC Vol. 8, No. 5
May 1959, Unclassified.

PARKE KOVAR, O.

Distr: 4E2o(n)

✓ Superficial martensite in an Fe-Ni-Co alloy [Kovar] and the general conditions for its formation. A. Mašín (Research Inst. Transport, Prague) and O. Bakáčová. *Acta Tech. Acad. Sci. Hung.* 26, 403-18 (1959) (in German).— In addn. to martensite produced in bulk by heat-treatment, superficial martensite can be formed on metallographic specimens of Kovar (nominally Ni 28, Co 18%, and Fe). (Similar formations had been seen on Fe-Cr-Mn-C and Fe-Mn-C alloys.) This is shown to be caused by metallographic grinding and can be removed by repeated polishing. The superficial martensite forms preferentially on certain crystallographic planes, so that not all grains on a metallographic plane may show it. Specific deformation requirements exist for the formation of the superficial martensite, which was not observed near a mark scribed on a previously polished specimen. The occasional occurrence of superficial martensite in rows is attributed to alloy inhomogeneity.

B. F. Brown

4
MJC(50)

7
nfc(jd)

Distr: 4E2c(m)

The dissolution of fragmented carbides and nitrides and the aging of steels with a high carbon content after cold de-forming. Olga Bakalíková and Alois Mašín (Inst. Vacuum Electronics, Prague). Acad. rep. popolare Române, Studii cercetari met. 5, 151-7(1960).—The variations of elec. resistivities measured at -103° and the aging after cold de-formations were studied by means of the electron microscope. During this process a dissoln. of carbide particles occurs, entraining the passage of C atoms of the ferrite in the solid soln. In the solid soln. the C atoms, as well as the N atoms, may move freely within the crystal lattice, thus provoking the aging process, and explaining the occurrence of the aging of steels with high C content after cold deformation. The general laws of the aging of steels with high C content were established by analogy with the aging of steels with low C content, and the exptl. data of the process above mentioned are explained.

M. Ben Eliezer

S/126/60/010/001/024/027/XX
E073/E535

AUTHORS: Bakaliková, O. and Masin, A.
TITLE: Influence of Heat Treatment Prior to Grinding on the
Formation of Surface Martensite
PERIODICAL: Fizika metallov i metallovedeniye, 1960, Vol.10, No.1,
pp.101-105

TEXT: In accordance with earlier work of the authors (Ref.1),
the formation of surface martensite is due to the tendency of the
alloy towards martensite transformation, which depends in the
first instance on the chemical composition and on the uniformity of
the distribution of the individual elements in the alloy. The
formation of surface martensite is influenced by grinding which is
carried out in the preparation of cuts (Refs. 1 and 2). Simultaneous
presence of both factors is necessary to bring about the formation
of surface martensite. The first factor, the influence of the
orientation of the crystal lattice of the austenite grains and of
twins, is inter-related to a greater or lesser extent with the
influence of grinding inasmuch as it affects the breaking up of the
crystallites, the rotation of the formed blocks etc. during the
process of grinding. In the here described work the authors

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S/126/60/010/001/024/027/XX
E073/E535

Influence of Heat Treatment Prior to Grinding on the Formation of Surface Martensite

investigated the influence of the annealing temperature and of small fluctuations in the carbon content prior to grinding on the formation of surface martensite. Whilst in the present work the effect of heat treatment prior to grinding was studied, in the earlier work (Ref.2) the influence of the temperature after grinding, i.e. its influence on surface martensite already present, was studied. Specimens 20 x 20 x 1.5 mm of three Kovar type alloys with differing tendencies to form surface martensite were investigated: (composition in %) A - 27.5 Ni, 18.3 Co, 0.30 Mn, 0.065 Mg, 0.020 C, rest Fe; C content after annealing 0.068 (in charcoal) and 0.010 (in air); B - 26.7 Ni, 18.2 Co, 0.39 Mn, 0.047 Mg, 0.034 C, rest Fe; C content after annealing 0.089 (in charcoal) and 0.025 (in air); C - 28.0 Ni, 17.97 Co, 0.48 Mn, 0.053 Mg, 0.10 C, rest Fe; C content after annealing not analysed. Two specimens of each alloy were ground with emery paper and polished with velvet using an aqueous suspension of spineline for the purpose of verifying the tendency of the alloy to form surface martensite. The specimens of the material A proved to have considerable

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S/126/60/010/001/024/027/XX
E073/E535

Influence of Heat Treatment Prior to Grinding on the Formation of Surface Martensite

quantities of surface martensite, there was less in specimens of the alloy B and none whatever in the alloy C, the structure of which remained purely austenitic. Six specimens each of each alloy and each variant were heated to temperatures up to 900, 1000 and 1100°C in the furnace with a protective atmosphere of dry hydrogen (heat treatment I) and held at that temperature for one hour. After annealing, two specimens remained without additional treatment, two others were cooled to -78°C and two to -193°C (heat treatment II). Following that, all the specimens were wet ground and mechanically polished. The changes in the carbon content were achieved by annealing in differing media. The increase in the carbon content was achieved by carburizing the specimens by annealing them in charcoal. On the other hand, a reduction in the carbon content was achieved by annealing in air. The annealing temperatures were 900, 1000 and 1100°C and a part of the specimens were again cooled down to -78 and -193°C. The percentual contents of the surface martensite and the normal martensite are tabulated.

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S/126/60/010/001/024/027/XX
E073/E535

Influence of Heat Treatment Prior to Grinding on the Formation of
Surface Martensite

It was found that the formation of surface martensite is directly dependent on the proneness of the alloy to normal martensitic transformation. The authors conclude that in a similar manner to the influence of heat treatment prior to grinding on the formation of surface martensite, it can be anticipated that mechanical working at elevated temperatures (rolling, forging etc.), during which displacement of elements by diffusion is possible, will influence the formation and the quantity of surface martensite during grinding. Probably this is the cause of a striated distribution of the surface in the normal martensite observed in other work published by the authors (Refs. 1-4). Acknowledgments are made to the Head of the Materials Division of Issledovatel'skiy institut vakuumnoy elekrotekhniki (Research Institute for Vacuum Electrical Engineering), Mr. Kvarda, for making the work described in this paper possible. There are 2 tables, 1 figure and 4 non-Soviet references.

ASSOCIATIONS: Scientific Research Institute of Vacuum Electrical Engineering and Physics Laboratory of the Transport Research Institute, Prague.
Card 4/5

S/126/60/010/001/024/027/xx
E073/E535
Influence of Heat Treatment Prior to Grinding on the Formation of
Surface Martensite
SUBMITTED: March 3, 1960

✓
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Card 5/5

BAKALIKOVA, O.; MASIN, A.

Mechanical treatment prior to metallographic polishing, and its influence on the formation of superficial martensite. Studii cerce metalurgie 6 no.3:259-267 '61.

1. Institutul de cercetari pentru electrotehnica vidului, Praha
(for Bakalikova) 2. Laboratorul de fizica al Institutului de cercetari de telecomunicatie al Ministerului de telecomunicaties, Praga
(for Masin)

MASIN, A.; BAKALIKOVA, O.

Influence of pressure, temperature, and mechnaical grinding on the
appearance of surface martensite. Acta techn Hung 32 no.1/2:247-259
'61. (EEAI 10:5)

1. Physikalisches La oratorium des Forschungsinstituts fur
Verkehrswesen, Resortanstalt des Verkehrsministeriums, Praha (for
Masin). 2. Forschungsinstitut fur Vakuumelektrotechni, Praha (for
Bakalikova)
(Martensite)

MASIN, A.; JEZEK, J.; BAKALIKOVA, O.

About the nature of surface martensite. Acta techn Hung 32 no.1/2:
261-266 '61.
(EEAI 10:5)

1. Staatliches Forschungsinstitut fur Material und Technolgia, Praha
(for Jezek)
(Martensite)

LEVIN, G.M., kand.tekhn.nauk; BAKALIN, Yu.I., inzh.

Heat exchange during the boiling of water in a circular slot with
natural circulation. Izv. vys. ucheb. zav.; energ. 6 no.12:119-122
D '63. (MIRA 17:1)

1. Kaliningradskiy tekhnicheskiy institut rybnoy promyshlennosti i
khozyaystva. Predstavlena kafedroy kholodil'nykh i kompressornykh mashin
i ustyanovok.

ACC NR: AP6033067

SOURCE CODE: UR/0201/66/000/003/0028/0032

AUTHOR: Bakalin, Yu. I.; Nesterenko, V. B.; Kremeshnyy, A. I.

ORG: IYaE AN BSSR

TITLE: Stand for the investigation of heat exchange of a dissociating gas at low pressure

SOURCE: AN BSSR. Vestsi. Seryya fizika-tehnichnykh navuk, no. 3, 1966, 28-32

TOPIC TAGS: heat exchange, gas dissociation, thermodynamic calculation

ABSTRACT: To estimate the degree to which heat exchange in chemically reacting gases is modified by the chemical reactions and to measure this heat exchange, the authors have developed a test stand for measuring heat transfer from a dissociating gas. The heat-transfer liquid was fed to an evaporator, preheater, experimental heat-transfer section, a refrigerator for cooling the spent gas and a condenser. The main, measuring, and auxiliary equipment is described and the theory underlying the measurements is briefly developed. The measurements, made at temperatures up to 150°C, consisted of a determination of the local heat transfer coefficient at heat loads from 8×10^3 kcal/m²hr to 1.5×10^4 kcal/m²hr, for Reynold's numbers from 7×10^3 to 10^4 . The heat-transfer coefficient was found to be higher than expected from the theory, thus confirming the assumption that the chemical reactions increase the amount of heat. Preliminary experimental data have confirmed the possibility of using the relations previously obtained by other authors for heat-transfer liquids with greatly varying

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ACC NR: AF6033067

thermophysical properties. It is suggested that the final laws governing the heat transfer of dissociating gas be determined by means of further experimentation. Orig. art. has: 1 figure, 9 formulas, and 1 table.

SUB CODE: 20/ SUBM DATE: 20Sep65/ ORIG REF: 003/ OTH REF: 001

Card 2/2

BAKALINOV, Rista, dr.; RADOJKOVIC, Miloslav, dr.

ACTH therapy of tetanus. Srpski arh. celok. lek. 82 no.6:771-773
June 54.

1. Zarazno odeljenje Opste bolnice u Bitolju sef dr. Haim Abravanel.
(Rad je Urednistvo primilo 4.XII.1953 god.)

(TETANUS, ther. (ACTH, ther. use
 tetanus)
 ACTH)

BAKALINSKAYA, Ye. A. and BEL'TYUKOVA, K. I.

"Results of an Investigation of Bacterioses Infecting Grain Corps in the Ukrainian SSR, Report II, Bacterial Mottling of Sorghum", Mikrobiol Zhur, Kiev, Vol. 12, Issue 1, pp 3-10, 1950.

BAKALINSKAYA, Ye.D.; SAVENKO, N.P.

Sanitary, hygienic and physiological characteristics of working conditions in flax and hemp factories. Trudy Vor. med. inst. 47: 97-99 '62
(MIRA 16:12)

1. Kiyevskiy institut gigiyeny truda i professional'nykh zabolеваний

USSR/Human and Animal Physiology - Physiology of Work and Sport. T-12

Abs Jour : Ref Zhur - Biol., No 7, 1958, 32308

Author : Bakalinskaya, Ye.D.

Inst :

Title : Change of the Function of the Olfactory Analyisor in
Workers of a Blast Furnace Plant.

Orig Pub : Vrachebn. delo, 1957, No 1, 69-72.

Abstract : Examination of 150 workers by means of the tonometric olfactometer of A.Z. Dubrovskiy (10% solution of phenol and 9% solution of acetic acid), in comparison with persons not subjected to the action of factors found in a blast furnace plant, found a clear increase of the threshold of sensation, shortening of adaption time and an increase of restoration time of sensitivity to the indicated smells. Of 5 groups subjected to the action of the separate factors (concentration of dust, blast furnace gas, high or low temperature, significant heat emmission), the

Card 1/2

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USSR/Human and Animal Physiology - Physiology of Work and Sport. T-12

Abs Jour : Ref Zhur - Biol., No 7, 1958, 32308

Greatest changes of smell were found in the group who worked under the bunker, i.e. those subjected to the effect of high concentrations of dust, and workers at the ore platform, those subjected to the combined effect of the dust, high temperature of the air, and heat emission of the blast furnace.

Card 2/2

BAKALINSKAYA, YE. D.; ZHIRNOVA, G. YE.; ZINCHENKO, V. P.; KOMPAN, A. I.;
SATANOVSKIY, A. M. ; ERMAN, I. M.; STEZHENSAYA, YE. I.

"Labor Hygiene in the Modern Blast Furnace Industry."

report submitted at the 13th All-Union Congress of Hygienists, Epidemiologists
and Infectionists, 1959.

ZHIRNOVA, G.Ye., kand.med.nauk; MAKSIMOVA, O.F., kand.med.nauk;
MEN'SHOV, A.A., kand.med.nauk; BAKALINSKAYA, Ye.D., nauchnyy
sotrudnik

Sanitary and hygienic condition of modern open-hearth plants and
health measures. Vrach.delo no.12:1305-1307 D '59.

1. Kiyevskiy institut gigiyeny truda i professional'nykh zabol-

(MIRA 13:5)

vaniy.
(STEEL INDUSTRY--HYGIENIC ASPECTS)

BAKALINSKAYA, Ye.D., nauchnyy sotrudnik

Some problems of industrial hygiene in flax and hemp mills. Vrach.
delo no.12:117-121 D '61. (MIRA 15:1)

1. Kiyevskiy institut gigiyeny truda i profzabolevaniy.
(TEXTILE INDUSTRY-HYGIENIC ASPECTS)

88

BAKALINSKIY, S.P.; BRYUNELLI, B.Ye.; KROTEVICH, N.F.

Recording geomagnetic pulsations by a highly sensitive magnetograph. Mezhdunar.geofiz.god. no.7:65-67 '59.
(MIRA 13:2)
(Magnetometer)



ACC NR: AP7001962

SOURCE CODE: UR/0120/66/000/006/0195/0196

AUTHOR: Bakalinskiy, V. P.; Bugayenko, V. V.; Tsymbal, V. P.

ORG: none

TITLE: Static digital register with visual indication

SOURCE: Pribory i tekhnika eksperimenta, no. 6, 1966, 195-196

TOPIC TAGS: computer component, computer storage device

ABSTRACT:

A simple and reliable decade register consisting of ten TKh8G glow-discharge thyratrons a (L_1-L_{10}) connected into cathode circuits of an IN-2 digital indicator tube (see Fig. 1) is described. The recording of information is performed when the pulse write signal which is applied to the first control grid of all thyratrons coincides with the write enable signal which is applied to the second control grid of a selected thyratron. When the write enable signal is applied, the coincidence write signal fires thyratron L_{10} . A potential on both the plate of L_{10} and the "zero" cathode of L_{11} drops, causing the gap between the plate and the "zero" cathode of L_{11} to fire. The digit 0 is indicated as a result. The next signal causes the corresponding thyratron and the required digit to fire. At this time the negative voltage drop from the plate of conducting thyratron is

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UDC: 621.374.325.4

ACC NR: AP7001962

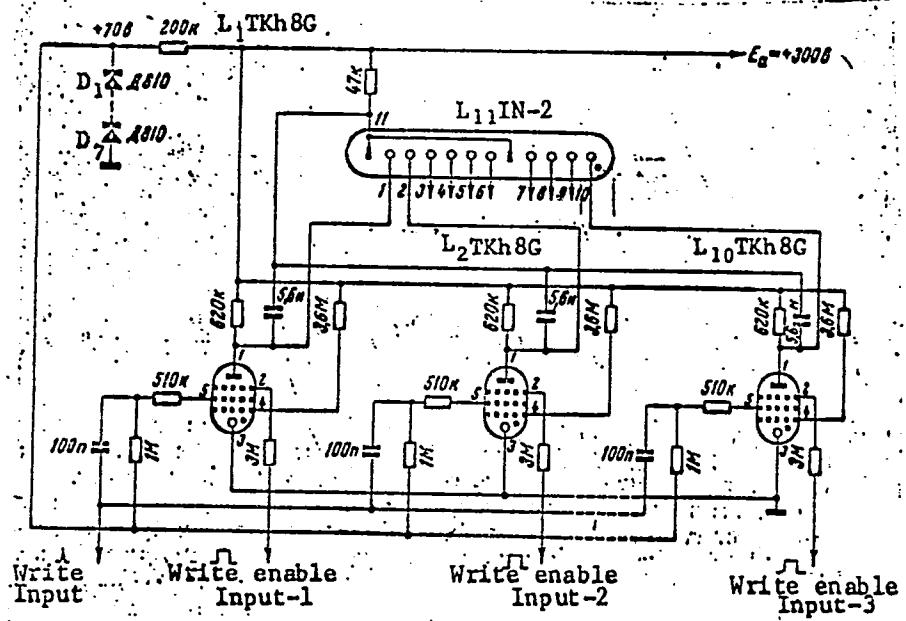


Fig. 1. Circuit of digital register

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ACC NR: AP7001962

simultaneously applied to the plates and all cathodes of the digital indicator tube and to the plate of conducting thyratron L₁₀. The potential on the plate of L₁₀ falls below the arc-maintaining voltage of the tube, and the thyratron stops conducting. Simultaneously the discharge stops between the plate and the "zero" cathode of L₁₁. When the next pulses are applied, the process is repeated. Thus the information concerning the last input signal is always stored in the register. Operation of the circuit is stable during variations in power supply voltage from 280 to 350 v. The amplitude of the rectangular write pulses (20—40 μ sec duration,) which are applied to the first control grids of the thyratrons, is not less than 70 volts. The amplitude of pulses which are applied to the inputs of "write enable" can be varied from 110 to 150 volts. Orig. art. has: 1 figure.

SUB CODE: 09/ SUBM DATE: 21Dec65/ ORIG REF: 003/ ATD PRESS: 5111

Card 3/3

BAKALJSZ, Janosne, tanar

Contribution to the thesis "Trads unions in capitalism."
Munka 13 no.10:25 0 '63.

1. Szakszervezetek Orszagos Tanacsa iskola.

VOINOVA-RAIKOVA, Zh.; BAKALIVANOV, D.

Research on the biological activation of organomineral mixtures.
Izv Inst "Nikola Pushkarov" no.2:39-56 '62.

BAKALIVANOV, D.

Distribution of mold antagonists in some Bulgarian soils.
Izv. Inst "Nikola Pushkarov" no. 5:225-236 '62.

BKALLO, IV.

AUTHORS: Rozenfel'd, L. (Professor), Kharitonov, V., Onosovskiy, V., Mamuylo, N., Zhebenko, A., and Bakallo, N. (Engineers).

TITLE: Investigation of the refrigeration equipment of the refrigerator ship, "Aktyubinsk". (Ispytaniye kholodil'nogo oborudovaniya refrizheratornogo sudna "Aktyubinsk").

PERIODICAL: "Kholodil'naya Tekhnika" (Refrigeration Engineering), 1957, No. 2, pp. 6 - 10 (USSR).

ABSTRACT: The results are described of tests of a refrigerated Diesel-electric ship, carried out by the Chair of Refrigeration Machinery of the Leningrad Technological Institute in cooperation with the team of a Baltic plant. The refrigeration machinery was designed by the Central Refrigeration Machinery Design Office and manufactured by the Moscow "Compressor" Works. The "Aktyubinsk" has a displacement of 10 250 tons and is one of a larger series of refrigerator vessels. It has 5 refrigerated holds and 5 refrigerated 'tween decks of a useful volume of 6700 m³, enabling transportation of 2700 tons of frozen or 3350 tons of chilled fish. The refrigerated holds and 'tween decks are subdivided into a fore and an aft group, each of which can operate at differing temperatures. The cooling of the holds and the 'tween decks is effected by a solution of calcium chloride. In single stage operation a temperature of -6 C

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Investigation of the refrigeration equipment of the refrigerator ship, "Aktyubinsk". (Cont.) 66-2-2/22

can be maintained in the holds and in the 'tween decks whilst in 2-stage operation a temperature of -18 C can be maintained so that it is possible to maintain a temperature of -6 C in one group of chambers and 'tween decks and a temperature of -18 C in the other group'. The characteristics of the refrigeration machinery were established at the test stand of the "Compressor" works and have been described in an earlier paper (1). The results of the tests of the refrigerator ship are discussed and summarised in 2 tables. During the tests the entire refrigeration equipment operated satisfactorily, the insulation of the refrigerated holds and 'tween decks is of good quality and operated satisfactorily. The adopted 2-stage system is very simple in operation but the author considers it advisable to develop a circuit with an intermediate steam extraction applicable for marine use and to compare the respective technical and economic indices. To gain a clearer picture on the correct selection of the type of refrigeration machinery the applied 2-stage set МХМ-АДС-150 should be compared with a high r.p.m. multi cylinder compressor, both stages being in a single unit. For marine conditions it may be of interest

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Investigation of the refrigeration equipment of the refrigerator ship, "Aktyubinsk". (Cont.) 66-2-2/22

to use a rotational compressor as a booster compressor of the lower stage. A number of slight inadequacies revealed during the tests should be eliminated and further control and metering instruments should be installed.

There are 3 figures, 2 tables and 1 Slavic reference.

AVAILABLE:

Card 3/3

BAKALO, A.N., kandidat sel'skokhozyaystvennykh nauk.

Effect of castration time on the growth and development of steers.
Veterinariia 32 no.12:61-63 D '55. (MIRA 9:4)

1.Vsesoyuznyy selkhozgeneticheskiy institut imeni T.D.Lysenka.
(CASTRATION) (BEEF CATTLE)

U.S.S.R.

USSR / Farm Animals. Hogs.

U-6

Abs Jour : Ref Zhur - Biologiya, No 16, 1957, 72099

Author : Bakalo, A.N., Vaganova, A.I.

Title : The Growth of Piglets Without Silage.

Orig Pub : Svinovodstvo, 1956, No 10, 10-12.

Abstract : Tests on the growth of suckling-pigs without special feed-silage were conducted on two litters. 2-3 days after their birth the pigs received in their troughs water, ground chalk, chopped wood-coal and heated seed. From the 5th day on, the piglets ate coal, from the 7th on - heated seed, and from the 10th day on, the feed which was given to the sows. The sows' ration consisted of barley and corn mush and of sunflower cake and the green mass of corn and lucerne. When removed from the mother, the piglets reached the weight of 13-14.5 kg.

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BAKALO, L. A.

To be submitted for the International Symposium on Macromolecular Chemistry,
Montreal, Canada, 27 Jul - 1 Aug 1961.

DEER

- BRONSTEIN, T. M.**, Institute of High Molecular
Chemistry, Academy of Sciences USSR Leningrad,
jointly with KIRILLOV, V. R. and KAZAKOV, M.,
Duke University - "Elasticity
of cubic lattice chain networks" (Group 2)
- BRODOWSKI, Boilash, and BOISSEV, A. A.**, Moscow
Institute of Fine Chemical Technology, Tsentr, M. V.
Leningrad - "Interaction of polyvinylidene with
sulphur" (Groups 4-5)
- KABASIK, Valentina A.**, Razu, Laboratory of Colloidal
Chemistry, Scientific Research Physico-Chemical
Institute, Izmail, L. Ya. Karpov, Moscow - "In
formation of big crystal structures in polymers
and their properties" (Group 2, invited lecture)
- PEREZOVICH, N. N.**, Novosibirsk, Institute
of Chemistry, Institute of Chemistry, Academy of Sciences
of the USSR (Group 3)
- PEREZOVICH, D. V.**, Institute of Chemistry, Academy of Sciences
of the USSR (Group 3)
- RECHENBERG, D. V.**, All-Union Scientific Research
Scientific Research Physico-Chemical Institute,
Izmail, L. Ya. Karpov, Moscow - "Polymerization
catalyzed by lithium and lithium alloy" (in German)
(Group 3-8)
- RECHENBERG, D. V.**, and PEREZOVICH, D. V.,
Institute of Petrochemical Synthesis, Academy of
Sciences USSR Moscow - "On the catalytic polymerization
and reactivity of allylbenzene" (Group 3-8)
- FEDOROVSKY, S. B.**, All-Union Scientific Research
Institute of Synthetic Rubber Izmail, S. V. Lebedev,
Leningrad - "Temperature effect on polymer
structure in direct polymerization by alkali metals"
(Group 3-8)
- KOMAROV, I. Yu. and PEREZOVICH, D. V.**, All-Union
Scientific Research Institute of Synthetic Rubber,
Leningrad - "Study of branching in regular
isoprene polymers" (Group 1)
- PEREZOVICH, A. V.**, Izmail, L. Ya. Karpov,
Izmail, L. Ya. Karpov, Moscow - "Effect
of some factors and parameters" (Group 3-8)
Scientific Research
Physico-Chemical Institute, Izmail, L. Ya. Karpov,
Moscow - "Investigation of the mechanism of
reactions of polymers containing quaternary atoms
or carbon" (Group 4-5) PEREZOVICH, D. V.,
RECHENBERG, D. V., Institute of High Molecular
Compounds of the Academy of Sciences USSR,
Leningrad - "Stereo-regularity and optical
anisotropy of macromolecules" (Group not specified)
- SHAMOV, Roudash N.**, and SUDOV, V. I., Academy
of Sciences USSR, Tashkent, Uzbekistan - "The
investigation of the cotton cellulose polymerization
according to the molecular weight" (Group not
specified)
- ZHURAVLEV, N. B.**, Institute of Chemical Physics
of the Academy of Sciences USSR Moscow - "On
the kinetics of formaldehyde polymerization and
polyformaldehyde degradation" (Group 3-8)

BAKALO, L.A.; KRENTSEL', B.A.; PYRKOV, L.M.; TOPCHIYEV, A.V., akademik;
FRENKEL', S.Ya.

Mechanism of epichlorohydrin polymerization on the catalytic system
FeCl₃ X propylene oxide. Dokl. AN SSSR 141 no.3:613-615 N '61.
(MIRA 14:11)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Epichlorohydrin) (Polymerization)

S/081/62/000/005/038/112
B151/B101

AUTHORS: Obolentsev, R. D., Bukharov, V. G., Pozdnyakova, T. Ye.,
Alalykina, L. A., Bakalo, L. A., Pototskaya, A. Ye.

TITLE: The synthesis of mono-substituted thiophanes

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 5, 1962, 263-264,
abstract 5Zh236 (Sb. "Khimiya sera- i azotorgan. soyedineniy,
soderzhashchikhsya v neftyakh i nefteproduktakh". v. 3. Ufa,
1960, 9-17)

TEXT: A general method is put forward for the synthesis of α -substituted thiophanes, starting from alkylfurylcarbinols, according to the following scheme;

$\text{RCH}(\text{OH})\overset{\text{C}}{=}=\text{CHCH=CHO}$ (I) $\rightarrow \text{RCO}-\text{CH}_2\text{CH}_2\text{COOC}_2\text{H}_5$ (II) $\rightarrow \text{RCH}(\text{OH})\text{CH}_2\text{CH}_2\text{CH}_2\text{OH}$ (III) \rightarrow ✓
 $\rightarrow \text{RCHBrCH}_2\text{CH}_2\text{CH}_2\text{Br}$ (IV) $\rightarrow \text{RCHCH}_2\text{CH}_2\text{CH}_2\overset{\text{S}}{\text{S}}$ (V). I is converted by heating
for 2.5 - 3 hrs. in abs. $\text{C}_2\text{H}_5\text{OH}$ containing 0.3 - 0.5% HCl gas (in the
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The synthesis of mono-substituted ...

case of high mol. wt. R the heating is carried out for 0.5 hrs, 4-9% HCl gas) with yields of 35 - 60%, into ethyl esters II (IIa-f) (here and later are given the substance, R, b. p. in $^{\circ}\text{C}/\text{mmHg}$, $n^{20}\text{D}_4$, d_4^{20}): IIa, $\text{CH}_3\text{C}(\text{CH}_3)_2\text{CH}_2$, 89-91/4, 1.4346, 0.9593; b, $\text{CH}_3\text{CH}_2\text{C}(\text{CH}_3)_2\text{CH}_2$, 104-105/4, 1.4410, 0.9562; c, $\text{CH}_3(\text{CH}_2)_5$, 113-115/2, 1.4370, 0.9440; d, $\text{CH}_3(\text{CH}_2)_7$, 131-132/2, 1.4403, 0.9317; e, $\text{CH}_3(\text{CH}_2)_8$, 145-146/3, 1.4430, 0.9256; f, $\text{CH}_3-(\text{CH}_2)_{10}$, -, m. p. 25-27 $^{\circ}\text{C}$, -, -. The II obtained are reduced with a two-fold excess of LiAlH_4 to the corresponding III (IIIa-i): IIIa, $\text{CH}_3\text{C}(\text{CH}_3)_2\text{CH}_2$, 112-114/3, 1.4545, 0.9319; b, $\text{CH}_3\text{CH}_2\text{C}(\text{CH}_3)_2\text{CH}_2$, 123-124/3, 1.4637, 0.9373; c, $\text{CH}_3(\text{CH}_2)_5$, 139-140/3.5, 1.4558, 0.9249; d, $\text{CH}_3(\text{CH}_2)_7$, -, m. p. 46-46.5 $^{\circ}\text{C}$, -, -; e, $\text{CH}_3(\text{CH}_2)_8$, -, m. p. 41.5-42 $^{\circ}\text{C}$, -, -; f, $\text{CH}_3(\text{CH}_2)_{10}$, -, m. p. 59-60 $^{\circ}\text{C}$, -, -; g, 2- C_{10}H_7 , -, m. p. 88-89 $^{\circ}\text{C}$, -, -; h, 4-diphenyl, -, m. p. 80 $^{\circ}\text{C}$, -, -; i, cyclo- $\text{C}_6\text{H}_{11}\text{CH}_2$, -, m. p. 59.5-60.0 $^{\circ}\text{C}$.

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B151/B101

The synthesis of mono-substituted ...

-, -. The III glycols are dissolved in glacial CH_3COOH and the solution saturated with dry HBr at 100-120°C and then fractionated, when the IV (IVa-i) are obtained; 1Va, $\text{CH}_3\text{C}(\text{CH}_3)_2\text{CH}_2$, 125-126/15, 1.4685, 1.5648; b, $\text{CH}_3\text{CH}_2\text{C}-(\text{CH}_3)_2\text{CH}_2$, 99-102/2, 1.4962, 1.3623; c, $\text{CH}_3(\text{CH}_2)_5$, 122-123/3, 1.4940, 1.3607; d, $\text{CH}_3(\text{CH}_2)_7$, 137-139/2, 1.4902, 1.2976; e, $\text{CH}_3(\text{CH}_2)_8$, 157-159/2.5, 1.4865, 1.2633; f, $\text{CH}_3(\text{CH}_2)_{10}$, 180-182/3, 1.4863, 1.2201; g, $2-\text{C}_{10}\text{H}_7$, -, m. p. 54-56°C, -, -; h, 4'-diphenyl, -, m. p. 84-85°C, -, -; i, cyclo- $\text{C}_6\text{H}_{11}\text{CH}_2$, 132-133/1.5, 1.5202, 1.4310. On boiling the dibromides IV for 3 hrs. with a 50% water-alcohol solution of Na_2S there are formed, with yields of 80-90%, the V (Va-k): Va, $\text{CH}_3\text{C}(\text{CH}_3)_2\text{CH}_2$, 202-203/760, 1.4812, 0.9155; b, $\text{CH}_3\text{CH}_2\text{C}(\text{CH}_3)_2\text{CH}_2$, 107-108/17, 1.4862, 0.9272; c, $\text{CH}_3(\text{CH}_2)_5$, 240-241/760, 1.4823, 0.9095; d, $\text{CH}_3(\text{CH}_2)_7$, 275.5 - 276/760, 1.4793, 0.8992; e, $\text{CH}_3(\text{CH}_2)_8$, 292-293/760, 1.4792, 0.8940; ✓

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The synthesis of mono-substituted ...

f, $\text{CH}_3(\text{CH}_2)_{10}$, 326.5 - 327/760, 1.4786, 0.8938, g, $2-\text{C}_{10}\text{H}_7$, m. p. $74\text{-}75^\circ\text{C}$,
-, -, -; h, 4'-diphenyl, m. p. $59\text{-}60^\circ$, -, -, -; i, cyclo- $\text{C}_6\text{H}_{11}-\text{CH}_2$,
 $86\text{-}87/2$, 1.5135, 0.9811; k, $\text{C}_6\text{H}_5-\text{CH}_2$, $109\text{-}110/2$, 1.5710, 1.0577. With the
method given it was not possible to obtain V_k since the original phenyl-
furfurylcarbinol on boiling with an alcohol solution of HCl resinifies and
the corresponding dibromide was obtained in another way. (R. Paul, Compt.
rend., 1936, 202, 1444). The glycols IIg and IIIh were obtained by the
reductions of the corresponding β -(2-naphthoyl) and β -(4-biphenyloyl)-
propionic acids, synthesized by the condensation of the corresponding
hydrocarbons with the succinic anhydride using the Friedel-Crafts reaction.
The β -alkylthiophanes were obtained by another method:
 $\text{H}_5\text{C}_2\text{COCH}_2\text{CH}(\text{COOC}_2\text{H}_5)_2$ (VI) \rightarrow $\text{H}_5\text{C}_2\text{COCH}_2\text{CR}(\text{COOC}_2\text{H}_5)_2$ (VII) \rightarrow
 $\rightarrow \text{RCF}(\text{COOC}_2\text{H}_5)\text{CH}_2\text{COOC}_2\text{H}_5$ (VIII) \rightarrow $\text{RCH}(\text{CH}_2\text{OH})\text{CH}_2\text{CH}_2\text{CH}_2\text{OH}$ (IX) \rightarrow
 $\rightarrow \text{RCH}(\text{CH}_2\text{Br})\text{CH}_2\text{CH}_2\text{Br}$ (X) \rightarrow $\text{RCHCH}_2\text{CH}_2\text{SCH}_2$ (XI). The Na derivatives of VI
are condensed in the usual way with halogen alkyls and yields of 80-90%
of VII are obtained. These are saponified, decarboxylated and esterified
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The synthesis of mono-substituted ...

when VIII (VIIIa-d) are obtained in a yield of 70-90%. VIIIa, $(\text{CH}_3)_2\text{CHCH}_2$, 96-98/2, 1.4260, 0.9710; b, $\text{CH}_3\text{CH}_2-\text{CH}(\text{CH}_3)\text{CH}_2$, 101-103/2, 1.4300, 0.9633; c, $\text{CH}_3(\text{CH}_2)_4$, 96-97/1.5, 1.4310, 0.9625; d, $\text{CH}_3(\text{CH}_2)_7$, 130-131/1, 1.4365, 0.9453. VIII is reduced with LiAlH_4 (1.25 moles) and (IXa-d) are distilled off: IXa, $(\text{CH}_3)_2\text{CHCH}_2$, 118-120/1.5, 1.4525, 0.9396; b, $\text{CH}_3\text{CH}_2\text{CH}(\text{CH}_3)\text{CH}_2$, 129-130/2.5, 1.4550, 0.9289; c, $\text{CH}_3(\text{CH}_2)_4$, 132-134/3, 1.4560, 0.9299; d, $\text{CH}_3(\text{CH}_2)_7$, 161-162/2, 1.4590, 0.9137. From the IX obtained by the method described above the X (Xa-d) are obtained: Xa, $(\text{CH}_3)_2\text{CHCH}_2$, 75-76/1.5, 1.4983, 1.4731; b, $\text{CH}_3\text{CH}_2\text{CH}(\text{CH}_3)\text{CH}_2$, 102-103/2.5, 1.4975, 1.4205; c, $\text{CH}_3(\text{CH}_2)_4$, 114-116/3, 1.4975, 1.4144; d, $\text{CH}_3(\text{CH}_2)_7$, 128-129/1, 1.4910, 1.3078. The X are converted in the usual way into XI (XIa-d); XIa $(\text{CH}_3)_2\text{CHCH}_2$, 200-201, 1.4830, 0.9216; b, $\text{CH}_3\text{CH}_2\text{CH}(\text{CH}_3)\text{CH}_2$, 221.5-222, 1.4824, 0.9168; c, $\text{CH}_3(\text{CH}_2)_4$, 229.5-230, 1.4842, 0.9184; d, $\text{CH}_3(\text{CH}_2)_7$, 282.5-283, 1.4808, 0.9057. The yields in XI were 84-93%
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B151/B101

The synthesis of mono-substituted ...

based on X and 30-40% based on VI. [Abstracter's note: Complete translation.]

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51190

1407

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S/020/62/142/002/018/029
B106/B101

AUTHORS: Bakalo, L. A., Krentsel', B. A., Oppeneyym, V. D., and Topchiyev, A. V., Academician

TITLE: The structure of the FeCl_3 /propylene oxide catalyst and the mechanism of stereospecific polymerization of some epoxy compounds

PERIODICAL: Akademiya nauk SSSR. Doklady, v. 142, no. 2, 1962, 347-350

TEXT: The polymerization of organic oxides on a catalyst from anhydrous ferric chloride and propylene oxide takes a stereospecific course which is usually attributed to the heterogeneity of the catalytic system (Ref. 3: C. C. Price, M. Osgan, J. Am. Chem. Soc., 78, 4789 (1956)). In a previous study (Ref. 6: L. A. Bakalo, B. A. Krentsel', A. V. Topchiyev, Vysokomolek. soyed. 4 (1962)), however, the authors found that the polymerization of epichlorohydrin and divinyl monoxide on the catalyst mentioned also takes a stereospecific course, although the system monomer - catalyst is perfectly homogeneous. The structure of the catalyst has now been

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B106/B101

The structure of the FeCl_3 /propylene...

investigated to clarify the mechanism of stereospecific polymerization. The catalyst was prepared, according to Ref. 2 (see below), from sublimed FeCl_3 and propylene oxide in dry CCl_4 . Its composition in % was: Fe

15.06; C 37.33; H 6.56; Cl 21.26. To separate the organic part, the catalyst was dissolved in acetone, and the iron was precipitated with sodium hydroxide. The resulting suspension was diluted with water and extracted with ether. The extract was rinsed with water, soda solution, and again with water, and dried over Na_2SO_4 . After evaporating the ether,

the residue was fractionated (20 .. 30 theoretical plates) in a vacuum of 1.5 mm Hg. Three fractions (b. p. $45.5 - 46.5^\circ\text{C}$, $46.5 - 47.5^\circ\text{C}$, and $47.5 - 49.0^\circ\text{C}$, respectively) were collected and subjected to elementary analyses, as was the residue. The molecular weight of the catalyst was determined according to Rast, and the content of mobile hydrogen in the organic portion of the catalyst according to Tserevitinov, with ethyl magnesium iodide. It has been proved by nephrite-test and on the basis of infrared spectra that the organic portion contains chlorine. Thus, the empirical molecular formula of the catalyst was found to be $\text{C}_1\text{Fe}(\text{C}_6\text{H}_{12}\text{O}_2\text{Cl})_2$. The structure of the organic portion of the catalyst was

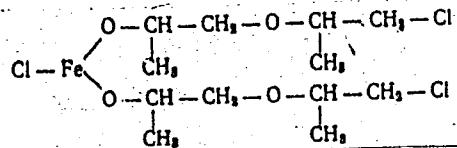
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The structure of the $\text{FeCl}_3/\text{propylene...}$

clarified by infrared spectroscopy (ИКС-14 (IKS-14) spectrophotometer in the frequency range of $1800 - 640 \text{ cm}^{-1}$). In this connection, the arrangement of the epoxy ring opening with subsequent development of the ether bond was ascertained. It has been proved that the opening of the epoxy ring during the reaction of ferric chloride with propylene oxide takes place at the primary carbon atom, the configuration at the secondary carbon atom being maintained. These results provided the following structural formula for the catalyst in question:



It is of interest that also the organic portion of the catalyst from anhydrous ferric chloride and epichlorohydrin shows the same arrangement of ether bonds. This result and the previously (Ref. 6) shown homogeneous character of the system indicate that the opening of the oxygen-containing ring at the primary carbon atom, in which the configuration at the

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The structure of the FeCl_3 /propylene...

asymmetric carbon atom during polymerization is maintained, is the cause for the stereospecificity of polymerization of the α -oxides of olefins. Previous orientation of the monomer, as assumed by Price and collaborators (Ref. 3), is therefore not required in this case. There are 1 figure, 1 table, and 8 references: 2 Soviet and 6 non-Soviet. The four most recent references to English-language publications read as follows: Ref. 2: A. B. Borkovec, US pat. 2861962 (1958); R. O. Colclough, G. Gee, W. C. E. Higginson et al., J. Polymer Sci., 34, 171 (1959); I. Ishida, Bull. Chem. Soc., Japan, 33, 731 (1960); S. Misushima, T. Shimanouchi et al., J. Chem. Phys., 26, 970 (1957). X

ASSOCIATION: Institut neftekhimicheskogo sinteza Akademii nauk SSSR
(Institute of Petrochemical Synthesis of the Academy of Sciences USSR)

SUBMITTED: October 6, 1961

Card 4/4

BAKALO, L.A.; KRENTSEL', B.A.

Catalytic polymerization of organic α -oxides. Usp.khim. 31
no.6:657-669 Je '62. (MIRA 15:5)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Ethylene oxide) (Polymerization)

BAKALO, L.A.; KRENTSEL', B.A.; TOPCHIYEV, A.V.

Polymerization of some organic oxides. Part 1: Polymerization
of epichlorhydrin. Vysokom. soed. 4 no.9:1361-1365 S '62.
(MIRA 15:11)

1. Institut neftekhimicheskogo sinteza AN SSSR.
(Epichlorhydrin) (Polymerization)

BAKALO, L.A.; KRENTSEL', B.A.; TOPCHIYEV, A.V. [deceased]

Catalytic polymerization of epichlorohydrin. Neftekhimiia 3 no.2:
206-216 Mr-Ap '63. (MIRA 16:5)

1. Institut neftekhimicheskogo sinteza AN SSSR imeni A.V.Topchiyeva.
(Epichlorhydrin) (Polymerization)

GUTS, A.Yu. [Huts, A.IU.]; BAKALO, L.I.

How we strive for the rank of the communist labor team. Farmatsev.
zhur. 18 no.1:74-77 '63. (MIRA 17:10)

1. Apteka No.71, Mirgorod, Poltavskoy oblasti.

BAKALO, N.A.

Some indices of the chemical composition of sweat in leprosy patients.
Vest. derm. i ven. no. 2:44-47 '65. (MIRA 18:10)

1. Klinika kozhnykh i venericheskikh bolezney (zav. - chlen-korrespondent AMN SSSR prof. V.A.Rakhmanov) I Moskovskogo meditsinskogo instituta imeni I.M.Sechenova.

BAKALO, N.A.

Local sweat secretion in leprosy and some dermatoses. Vest.
derm. i ven. 39 no.4:61-66 Ap '65. (MIRA 19:2)

1. Kafedra kozhnykh bolezney (zav. - chlen-korrespondent AMN SSSR
prof. V.A. Rakhmanov) I Moskovskogo ordena Lenina meditsinskogo
instituta imeni Sechenova. Submitted June 24, 1964.

VYKHODTSEV, I.V.; GUSAROVA, A.N.; POPOVA, L.I.; IONOV, R.N.; BAKALO, V.Ya.;
TSYBINA, Ye.V., tekhnicheskiy redaktor

[Recommendation for grass seeding and irrigation of mountain
pastures in the Tien Shan and Issyk-Kul provinces and the Susamyr]
Rekomendatsii po vysokogornomu travoseianiiu i orosheniiu pastbishch
v Tian'-Shan'skoi, Issyk-Kul'skoi oblastiakh i na Susamyre. Frunze,
1956. 11 p. (MLRA 9:9)

1. Akademiya nauk Kirgizskoy SSR, Frunze. Institut botaniki.
2. Institut botaniki i Institut vodnogo khozyaystva i energetiki
Akademii nauk Kirgizskoy SSR (for Vykhodtsey, Gusalova, Popova, Ionov,
Bakalo)
(Issyk Kul Province--Pastures and meadows)
(Tien Shan Province--Pastures and meadows)

BAKALO, V.Ya.

Irrigation of grasses on uplands of Issyk-Kul' Province in the
Kirghiz S.S.R. Trudy Inst.vod.khoz.i energ.AN Kir.SSSR no.3:
49-59 '56. (MLRA 3:11)
(Issyk-Kul' Province--Pastures and meadows) (Irrigation)

POPOVA, L.I.; ASSORINA, I.A.; BAKALO, V.Ye.; VYKHODTSEV, I.V., red.;
ANOKHINA, M.G., tekhn.red.

[Recommendations for establishing meadows on the Dzhety-Oguz
Upland of Kirghizistan] Kyrgyz SSRinin Zheti-Oguz raionunun
syrtynda chop chabyndylardy tuzuu boiuncha rekomenratsiia.
Rekomendatsii po sozdaniyu senokosov na Dzhety-Oguzskikh
syrtakh Kirgizskoi SSR. Frunze, Izd-vo Akad.nauk Kirg.SSR,
1959. 44 p. (MIRA 12:11)

1. Akademiya nauk Kirgizskoy SSR. Institut botaniki.
(Dzhety-Oguz District--Pastures and meadows)

BAKALO V. Ya.

PAGE I BOOK EXPLORATION

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Akademiya nauk Kirgizskoy SSR
Izdatelstvo. Seriya yestestvennykh i tekhnicheskikh nauk, tom 1. Vyp. 1
(bers. Series on Natural and Technical Sciences, Vol 1, No. 1)

Pyrmen, 1959. 164 p. 500 copies printed.
Ed.: V.T. Kairirin; Tech. Ed.: M.O. Anobina.

PURPOSE: This book is intended for research scientists and teachers in institutes of higher education who may be interested in developments and research trends in various scientific fields.

CONTENTS: The book contains 12 articles by persons affiliated with the Academy of Sciences Kirgiz SSR on studies in physical chemistry, industrial chemistry, applied physics (blasting dynamics), electric power engineering, electronics, aeronomy, metallurgy, pure mathematics, etc. A bibliography of 1977 publications of the Academy includes works on history, archaeology, economics, linguistic literature, geography, biological sciences (botany, zoology, medicine), and technology. No personalitites are mentioned. References accompany most of the articles.

Bakalo, V.Ya., G.B. N.D. Shchukina, and Z.A. Masilimova. Termeftiflukov. Dielectric Determination of Pectins 43

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BAKALO, V. Ya,

Water requirements of wild and cultivated grasses in the
mountainous districts of Kirghizistan. Izv. AN Kir. SSR. Ser.
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(Kirghizistan—Grasses—Water requirements)

RISMAN, M.B. [Rysman, M.B.]; BAKALOR, M. Yu.; SHKOL'NIKOVA, N.B. [Shkol'nykova, N.B.]; GRABOVSKIY, P.A. [Hrabovs'kyi, P.A.]

Fusion sealing of seams and cuts on articles made from nylon
fabrics. Leh. prom. no. 2t51-52 Ap-Je'64 (MIRA 17t7)

BAKALOV, A. (g. Riga)

By the hands of Latvian experts. Prom.koop. no.11:43-46 N '55.
(MLRA 9:5)

(Riga--Furniture industry)

BAKALOV, A. (Riga)

For the Soviet people. Prom.koop. no.4:33-34 Ap '56. (MLRA 9:8)
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Purification of the Rila Mountains water for the water supply
of Sofia. Khidrotek i melicr 6 no.6:185 '61.

BAKALOV, Al.; MEDEVEDEV, F.

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no.11;30-31 '64.

BAKALOV, A.N.

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BAKALOV, A.N.

DIPHTHERIA

"The Effect of Previously Suffered Diseases on Inoculative Immunity to Diphtheria", by A.N. Bakalov, Zdravookhraneniye Belorussii, No 2, February 1957, pp 52-53.

The author reports an apparent decrease of inoculative immunity in children who have suffered two or more combinations of the following diseases: scarlet fever and measles, chicken pox and whooping cough, and whooping cough and measles. Such combinations of diseases, the author says, may completely destroy children's inoculative immunity to diphtheria. The article concludes that children who have suffered from such series of diseases, require a revaccination against diphtheria.

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- 15 -

USSR/Microbiology. Microbes Pathogenic for Man and Animals F

Abs Jour : Ref Zhur-Biol., No 13, 1958, 57758

Author : Bakalov A. N.

Inst : Not given

Title : On Some Factors which Affect Inoculation Immunity Against Diphtheria

Orig Pub : Zdravookhr. Belorussii, 1957, No 5, 39-40

Abstract : No abstract

Card 1/1

BAKALOV, A. N. Cand Med Sci -- (diss) "Problems of the epidemiology, microbiology, and preventive immunization ^{of} ~~against~~ diphtheria." Minsk, 1959. 15 pp
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Modification in the staining of diphtheria microbes. Zdrav. Belor.
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1. Iz oblastnoy Mogilevskoy sanitarno-epidemiologicheskoy stantsii
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(STAINS AND STAINING(MICROSCOPY))

BAKALOV, A.N.

Morphology of diphtheria bacilli under various methods of bacterioscopic investigation. Lab. delo 6 no.4:46 Jl-Ag '60. (MIRA 13:12)

1. Mogilevskaya oblastnaya sanitarno-epidemiologicheskaya stantsiya.
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BAKALOV, A.N., kand.med.nauk

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1. Mogilevskiy oblastnoy otdel zdravookhraneniya (zaveduyushchaya
M.V.Trusova).
(DIPHTHERIA--PREVENTIVE INOCUALTION)

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Methods for decreasing acute intestinal diseases. Zdrav. Bel. 9
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1. Iz Mogilevskogo oblastnogo otdela zdravookhraneniya (zaveduyushchaya-
M.V. Trusova) i sanitarno-epidemiologicheskogo upravleniya Ministerstva
zdravookhraneniya BSSR (nachal'nik - A.V. Khovanskiy).

BAKALOV, A.N.; CHIZH, I.V.

Effectiveness of therapeutic and preventive measures in intensive
foci of ascariasis. Med.paraz. i paraz.bol. 33 no.3:356 My-Je '64.
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1. Socie, B. L. M. J. Russ. Phys. Chem. Soc., 14, 12 p. 3461
2. A. I. Kostylev, S. A. Pashkovskii, "Electrolytic reduction of
aluminite, hydroxylapatite and hydroxyapatite" (in Russian)
Collected in: "Electrolytic Reduction of Mineral Compounds",
pp 755-756.
3. K. Itoh, "Formation of Metal An Electrode Catalyst by the
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4. S. B. Belyaev, "Some Properties of Polycrystalline Copper Steels
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5. S. I. Kuznetsov, "On the Variation of Plastic Current
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6. G. V. Zhdanov, "Change in the Magnetic Values of Catalysts
and Catalysts during the Process of Heating", Tr. Inst. Fiz. Akad. Nauk SSSR, No. 72-1766.
7. Chr. F. Lund, "Properties of New Catalysts Prepared in
Acrylic Copolymer Resins", Tr. Inst. Fiz. Akad. Nauk SSSR, No. 72-1767.
8. N. N. Nekrasov, "On the Preparation of U.S. Nickel
Ferrite Catalysts in the Oxidizing 13-102 System", Tr.
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10. N. S. Nekrasov, "Effect of Preparation and Time on the
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11. S. N. Nekrasov and S. N. Nekrasova, "Catalysis of
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Studies on the natural illumination of working areas and certain other etiological factors in a group of Sofia students with special reference to the prevention of myopia. Nauch. tr. viss. med. inst. Sofia 9 no.4:335-362 '59.

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(MYOPIA prev & control) (SCHOOL HEALTH)
(LIGHTING)

BAKALOV, D.

Qualitative analysis of uric acid in concretions. Lab.delo 6 no.1:
32-34 Ja-Fe '60. (MIRA 13:4)

1. Iz tsentral'noy biokhimicheskoy laboratorii, Sofiya.
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BAKALOV, D

Fluorimetric method for determining porphyrin. Ixv biol med BAN 3
no.3:97-102 '59. (EEAI 10:4)

1. Katedra po meditsinska khimiia pri VMI, Sofiia (Zav.: prof.
d-r Al. Spasov)
(FLUOROMETRY)
(PORPHYRINS)

BAKALOV, D.

Some problems in quantitative determination of neutral 17-ketosteroids
in the urine (I). Suvrem med., Sofia no.2:109-115 '61.

1. Katedra po meditsinska khimiia, Vissh meditsinski institut, Sofiia.
(Rukov. na katedrata prof. Al. Spasov.)

(17-KETOSTEROIDS urine)

S/081/62/000/020/012/040
B158/B101

AUTHORS: Bakalov, D., Panov, N., Sumerska, T., Robev, St.

TITLE: Examination of certain nitro-derivatives of aromatic amidines

PERIODICAL: Referativnyy zhurnal. Khimiya, no. 20, 1962, 149, abstract 20Zh125 (Doklad. Bolg. AN, v. 14, no. 8, 1961, 811-814 [summary in Eng.])

TEXT: 3-nitro-4-methyl-(I), 3-nitro-4-methoxy-(II), 3-nitro-4-chloro-(III) and N-(4-nitrophenyl)-benzamidine (IV), which have a possible radiobiological and pharmacological activity, are obtained when aromatic monoaryl substituted amidines are nitrated. At $\geq 30^{\circ}\text{C}$, 51 millimoles N-phenylbenzamidine are added to 40 ml HNO_3 ($d\ 1.52$) and after 10 min poured out in an excess of 5% cold KOH, giving IV, yield 89%, m.p. 168°C (from alcohol); hydrochloride (HC), m.p. $207\text{-}209^{\circ}\text{C}$ (from alcohol); hydrobromide (HB), m.p. $236\text{-}238^{\circ}\text{C}$ (from alcohol); hydroiodide (HI), m.p. $223\text{-}224^{\circ}\text{C}$ (from aqueous alcohol); picrate, m.p. $162\text{-}163^{\circ}\text{C}$; aniline-formyl

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Examination of certain ...

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derivative, m.p. 182°C; and nitrate, m.p. 200-201°C (decomp.). The following are obtained similarly (the product obtained, yield %, m.p. in °C and m.p. in °C of HC, HB and HI are given): I, 87, 195-196 (from benzene-dioxane, 1:2), 206-207 (from alcohol), 297-298, 220-223; II, 63, 213 (from alcohol-benzene, 3:1), 205-206, 210-212, 201-202; III, 79, 179-180 (from alcohol), -,-,-. A mixture of 2 millimoles of IV and 0.5 g Zn are heated for 1 hr at 200°C, cooled, extracted with 5 ml hot C₆H₆, then with 15 ml ether, the combined extract treated three times with 20 ml 2% HCl and C₆H₅CN is obtained from the organic layer; the aqueous layer is acidified and 4-nitro-aniline (V), m.p. 148°C, is obtained; Similarly, V and 3-nitro-n-toluic nitrile are obtained from I, and V and 3-nitro-anisic nitrile from II. 10 ml 10% H₂SO₄ is added to a mixture of 6.25 millimoles of I and 1 g Zn; after 2 hours the filtrate is made alkaline with KOH solution, extracted with 400 ml hot C₆H₆ and N-(4-aminophenyl)-benzamidine; a yield of 68%, m.p. 121°C (from benzene-C₆H₆), is obtained from the organic layer. [Abstracter's note: Complete translation.]

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BAKALOV, D., dots.

Phosphorus and its biological significance. Prir i znanie 14 no.9:
13-16 '61.

(Phosphorus)